



# GLOBAL CLIMATE CHANGE: EUROPE AND EURASIA

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*Through USAID's activities designed to improve energy efficiency in the European and Eurasian countries, the future of cleaner and more environmentally sound production is promising. Creating the proper market environments for energy efficiency and emissions reduction will not only help mitigate the effects of climate change but will promote economic development in the region.*

**Background.** The Europe and Eurasia (E&E) region is a significant energy producing, as well as consuming region that has important implications for the energy and environmental systems affecting global climate change. The E&E Bureau at USAID has addressed a range of energy issues central to the transition from communist, centrally-planned countries to democratic, market economies. E&E assistance programs have focused on both systemic reform and institution-building and projects that promote more efficient technologies and private investment. National and regional projects have addressed five main areas: developing sound national energy policies, energy prices and legal/regulatory systems; improving efficiency and reducing emissions in various sub-sectors; restructuring, commercialization and privatization of energy utilities and companies; closing high-risk nuclear power plants and improving nuclear safety; promoting regional energy cooperation and the integration of energy systems into Western Europe and international energy markets.

## Sector-Specific Climate Change Activities.

**Energy Efficiency and Renewable Energy.** USAID regional programs have drawn on and helped establish institutional capacity in both the private and public sectors and have involved partnership arrangements with U.S. companies and municipalities. Energy service companies, distributors, nongovernmental organizations (NGOs), energy efficiency centers, and government policy agencies and committees have been involved. USAID has helped to develop a number of projects that have subsequently been funded by the World Bank or the European Bank for Reconstruction and Development (EBRD). Activities fall into the categories of Policy, Planning, and Capacity Building; regional analyses of urban heating and affordability; and promoting financing for energy efficiency investments.

**Policy, Planning, and Capacity Building.** USAID has promoted national and local policies and strategies to encourage energy efficiency through activities implemented by the Alliance to Save Energy (ASE), International Resources Group (IRG), and Nexant. ASE works with partner energy efficiency centers and other NGO organizations in the region under the Municipal Network for Energy Efficiency (MUNEE). MUNEE is a regional network to strengthen the environment for improving heat supply and energy efficiency activities at the local level and to overcome the barriers to expanded private and commercial investment. The goal of MUNEE is to design, implement, and disseminate innovative heating and energy efficiency policies at the national and local levels, and identify barriers to their successful adoption. Furthermore, it will strengthen the capacity of regional and municipal stakeholders to develop and attract financing for heating and energy efficiency projects throughout the E&E region. MUNEE accomplishments include the following:

**USAID's partners in climate change activities in Europe and Eurasia include\*:**

- Alliance to Save Energy (ASE)
- International Resources Group (IRG)
- Subcontractors: EnCon Services International, Macedonian Center on Energy Efficiency, Timel Project Engineering, Albania Energy Efficiency Center, EnEffect
- Nexant
- Pierce Atwood
- Hunton & Williams
- U.S. Energy Association (USEA)
- National Association of Regulatory Utility Commissioners (NARUC)

\* Because partners change as new activities arise, this list of partners is not comprehensive.

- National policies (laws, strategies, codes and standards) in Macedonia, Albania, Moldova, and Armenia applicable to other countries in the region;
- Preparation of energy plans at the national level (Macedonia) and local level (Croatia) to examine cost-effective strategies for obtaining heat and energy services;
- Training municipal officials on energy planning;
- Analyses of rising energy costs on low-income population and discussions with relevant government ministries in Southeast Europe.

In addition, IRG is working with utilities in Southeast Europe to improve regional energy demand planning. This activity will develop a process and framework based on standardized information and approaches that can support energy policy and investment decision making for the individual countries and the region as a whole. Participants will examine future investment opportunities in energy efficiency, renewables and co-generation, and changes in patterns of home heating, including district heating and increased use of natural gas. The common methodology and consistent depiction of the national energy systems will enable comparison and potential integration of the various models to highlight synergies and differences and promote dialog aimed at encouraging regional cooperation in the realm of energy system planning.

*Regional Heating and Affordability.* The impact of higher energy prices on the economics and affordability of energy and heat remains a central concern. ASE is undertaking region-wide strategic evaluations and assessments of urban heating and residential/low-income utility service affordability.

*Urban Heating.* ASE is preparing a comprehensive statistical and policy assessment of the evolution of the urban heating industry over the past 15 years. The study will provide a thorough historical analysis of the District Heating industry highlighting best practices and success stories, and examining the implications for USAID's economic, democratic, and social transition programs. It will address the broad question of whether district heating systems have and are continuing to deteriorate in countries of the E&E region and what the economic and social implications are of these trends. The study will consider heat affordability and the use of subsidies; the impact of district heat systems on municipal and utility budgets; the extent of restructuring of heat utilities and accompanying levels of financing and investment to modernize or replace these systems; whether the efficiency and environmental performance of these systems (including end-use) improved and whether the systems are competitive with direct natural gas applications;

and the conclusions that can be made about the economic viability of district heating systems, including the implications in cases where they are not sustainable.

*Residential/Low Income Utility Service Affordability:* ASE is also examining effective ways to promote energy efficiency improvements in housing in general, with suggestions on methods to ensure adequate participation by low income households. This activity will document previous successes at promoting energy efficiency in the residential sector, and examine the role energy efficiency can play in providing targeted assistance to low-income households while allowing broader energy pricing reforms to go forward. The documented experience will be broadly disseminated to audiences consisting of municipalities and municipal associations; heating enterprises; homeowner associations; the energy efficiency community (NGOs, vendors, consulting engineers); energy regulators; social welfare officials; and international financial institutions (IFIs). Efforts will be made to suggest a specific approach that could be incorporated into IFI lending in one or two countries.

*Promoting Financing For Energy Efficiency Investments:* Energy efficiency services development is a potentially important area for private small and medium enterprise (SME) development and employment creation, and for commercial financing. USAID provides technical assistance to stimulate energy efficiency investment projects in Southeast Europe to leverage commercial or IFI lending in the municipal and residential sectors, with technical assistance provided by IRG, and earlier by Nexant.

In addition, USAID is developing a regional Development Credit Authority (DCA) facility for Southeast Europe. The DCA facility will provide partial guarantees to private lenders for a \$15 million portfolio. The borrowers would be municipalities and/or private energy service companies. The facility is now operating in Bulgaria, with plans to expand elsewhere in Southeast Europe. Similar facilities are also in place or under development in Ukraine, Georgia, and Kazakhstan.

Accomplishments include:

- Support to IFI loans testing models for private sector participation in district heating (Bulgaria), and loans for energy efficiency improvements in public facilities and to households (Serbia, Macedonia), for potential applicability throughout SE Europe.
- DCA loan guarantees to a commercial bank in Bulgaria, resulting in \$10 million loaned for 33 municipal and industrial projects.

The Bulgaria DCA program inspired multilateral banks to develop additional energy efficiency and renewable project financing programs in Bulgaria. The World Bank/GEF established the Bulgaria Energy Efficiency Fund (BEEF). The EBRD established energy efficiency credit lines for industrial and residential projects.

In Macedonia, the E&E regional program and the mission are cooperating on a program of energy efficiency in Macedonia schools. The program supports the mission's priority on decentralization, responding to the policy reform that in summer 2005 gave municipalities new authority for services (e.g., schools) and responsibility to pay for their costs, including energy and water. Pilot projects were implemented in five schools and one senior center in three cities, which provide a model for future improvements. As a direct outgrowth, USAID, World Bank, the Dutch embassy, and the Ministry of Education are planning for a national program of school energy efficiency.

In Albania, USAID is providing technical assistance to identify cost-effective energy and water efficiency measures which the Government of Albania can use as part of a low-income assistance program. IRG, with its subcontractor the Albanian Energy Efficiency Center, is implementing demonstration projects in representative low-income housing in Tirana and Elbassan. The results will be used to guide policy decisions by the Albania Ministry of Social Affairs, encouraging them to apply low-income energy bill payment funds to make energy efficiency improvements for low-income households.

*Legal, Regulatory and Market Development.* The E&E regional Energy and Infrastructure Office and the missions have developed an integrated program to support the Energy Community in Southeast Europe, established by treaty in October 2005. USAID is playing a critical role in the multi-donor effort in developing the regional and national regulatory and market frameworks and the institutional capacities essential to improve performance of energy utilities and enhance intra and interregional trade. USAID is working with the European Commission and the Council of European Energy Regulators on developing a Community Regulatory Board. A major milestone was the synchronous re-interconnection of the Balkans with the main West European electricity grid in 2004. The regional program has several mechanisms supporting this effort that help missions implement their programs. Legal and regulatory technical assistance is provided through Pierce Atwood and Hunton & Williams. Regional transmission planning and development of investment priorities for IFI lending is being supported through a cooperative agreement with the U.S. Energy Association starting in Southeast Europe. This activity has been expanded to the Black Sea region. A regulatory partnership program involving both regional and bilateral regulatory

partnerships between SEE and U.S. state regulators is being managed by the U.S. National Association of Regulatory Utility Commissioners. IRG is performing a regional tariff harmonization analysis and will examine opportunities to expand the use of natural gas.

Support is provided through a Cooperative Agreement with the U.S. National Association of Regulatory Utility Commissioners (NARUC) to the Energy Regulators Regional Association (ERRA), which consists of member energy regulators from throughout the E&E Region. ERRA fosters regulatory development through the exchange of information and experience, training and linkages with U.S. and European regulatory practices. ERRA's activities include ongoing technical committees on tariffs and licensing/competition; ad hoc working groups on such issues as monitoring, regulation of electricity cross border trading and legal issues; a Web site and newsletter; peer exchanges and regulatory training; and development of a tariff database.

For more information on Europe and Eurasia, visit USAID's Website at:

<http://www.usaid.gov>